Module 8

Safety and acceptability of multiple injections
Learning objectives

At the end of the module, the participant will:

- Know the benefits of multiple injections
- Understand the safety of IPV when administered with other vaccines
- Be able to respond to parental concerns regarding IPV and multiple injections

Duration

- 30 minutes
Key issues

1. It is safe to give multiple vaccine injections at one visit.

2. Multiple injections are better than spacing injections because they protect children, increase efficiency and lead to fewer overall vaccination visits.

3. Parental concerns about multiple injections can be addressed through reassurance, clear communication and pain reducing techniques.
Multiple Injections

It is safe to give multiple vaccine injections during one single visit.

Many countries have immunization schedules where children receive multiple vaccine injections at one visit.

Globally, most middle and high-income countries have been safely using multiple injections for more than a decade.
Multiple Injections

- Protect children against most common childhood illnesses
- Lead to fewer vaccination visits for parents and caregivers
- Increase the efficiency of immunization programs
Multiple vaccine injections

*protect children*

- Giving a child two or more vaccinations during the same visit offers protection during the most vulnerable early months of life.

- Spreading out vaccinations leaves babies unprotected from common childhood illnesses for a longer time.

- Spreading out vaccinations means parents or caregivers will have to schedule additional visits and bring their children back. *If children are not brought back, they will be unprotected from serious diseases and their lives may be threatened by illness.*
Multiple vaccine injections are more convenient for caregivers

- Spreading out vaccinations means parents or caregivers will have to schedule additional visits and bring their children back.

- By reducing the number of visits that a caregiver has to make, multiple injections are more convenient for caregivers.
Multiple vaccine injections increase efficiency

• Giving a child two or more vaccinations during the same visit is more efficient for health care providers

• Health providers are able to more efficiently provide and deliver other health services by reducing the time they need to spend providing vaccinations.
How should IPV be administered?

• IPV is administered by intramuscular injection (IM) in a dose of 0.5 ml into the outer part of the thigh.

• First, IPV and PCV injections should be given in one thigh, with injection sites separated by at least 2.5 centimetres (cm). The pentavalent injection should be given in the other thigh.
How to minimize pain during vaccination

1. Wash skin that is dirty. Swabbing clean skin is not necessary.
2. For intramuscular injections (IM), gently stretch and support the skin between thumb and forefinger. Push the entire needle in at a 90 degree angle with a quick, smooth action.
3. For all injections, depress the plunger slowly and smoothly, taking care not to move the syringe.
4. Pull the needle out quickly and smoothly at the same angle that it went in.
5. The caregiver may hold a clean swab gently over the site if it is bleeding after injection.
Importance of good communication

Health workers play important roles in parent and caregiver acceptance. Caregivers may not understand why their child needs an additional vaccine for polio and may be concerned about receiving multiple injections on the same visit.

Health workers need to explain the advantages of IPV and multiple injections, listen to caregiver’s concerns, and provide reassurance.
Responding to parental concerns

Provide reassurance: A strong health worker endorsement of IPV vaccine and multiple injections is essential to increase parent or caregiver acceptance. **Health workers should also encourage and promote the importance of immunization generally**

Provide clear responses to parent or caregiver questions: Health workers or providers need to be able to effectively answer or address questions and concerns related to the safety and value of multiple injections, the effectiveness of the vaccines, and child pain or discomfort.

Take steps to minimize pain during immunization: Healthcare workers should take appropriate steps to decrease pain during immunization.
Healthcare providers can say:

“Your child needs three shots/injections today: IPV vaccine, xxx and xxx.”

“IPV vaccine is very important because along with OPV it will provide your child with strong protection against polio. The additional dose of IPV will help protect your children against polio disease even more – and will give your child the benefits of both vaccines.”

“IPV provides immunity through the blood, while OPV provides immunity through the gut”

“Getting OPV and IPV is safe and strong protection against polio – a disease that is a threat to the health of your child and other children. Using both vaccines together provides the best form of protection – it protects your child and helps protect our community.”
Why does my child need three injections on one visit?
Giving a child several vaccinations during the same visit allows your child to be fully immunized as soon as possible. This provides protection during the vulnerable early months of your child’s life. In addition, giving multiple vaccinations at one time means fewer vaccination visits for parents and caregivers.

Is it safe to give multiple vaccine injections at one visit?
It is safe for your child to receive multiple injections at once. Many countries have immunization schedules where children receive multiple vaccine injections at one visit.
Is there any evidence that multiple injections of vaccines may increase the risk for adverse events?
No. Numerous studies have shown that giving multiple vaccinations during the same visit does not result in higher incidence of adverse events.

Aren’t multiple injections painful for the child?
While receiving multiple injections at once is painful, having to return for additional vaccines forces the child to experience pain on two visits. It is better for the child to experience one brief moment of pain than pain on two separate days.
Wouldn’t it be safer to separate vaccine injections and spread them out?
No, it is safer for your child to receive all of his vaccinations at once. Spreading out vaccinations leaves babies unprotected for a longer time.

If my child receives multiple injections at the same visit, will the vaccines be as effective if given alone?
Yes. IPV does not interfere with other vaccines and IPV is equally effective when given alone or with other vaccines.
Can multiple vaccines given at once “overwhelm” a child’s immune system?  
No. Children are exposed to numerous bacteria and viruses on a daily basis through eating and playing. Vaccines do not add a significant burden to the immune system.

Why did you not suggest this better injection when I came for immunization earlier? 
WHO has recently recommended that countries add at least one dose of IPV to routine immunization programs, with a dose administered at 14 weeks of age or the closest immunization visit following that age. Children would receive both OPV and IPV at 14 weeks or 4 months. IPV does not replace any of the OPV doses.
Key Messages

- It is safe to give multiple vaccine injections at one visit. Many countries have successfully introduced multiple vaccine injections into their routine immunization schedule.
- Multiple injections are better than spacing injections because they protect children, increase efficiency and lead to fewer overall vaccination visits.
- Parental concerns about multiple injections can be addressed through reassurance, clear communication and pain reducing techniques.
- Health workers need to listen, encourage and effectively communicate with caregivers to ensure that they receive their vaccines and return for future vaccinations.
End of module

Thank you for your attention!